

U. S. PLANT PATENT APPLICATION OF

WENDY R. BERGMAN

FOR: CHRYSANTHEMUM PLANT NAMED

‘YELLOW YOWOODSTOCK’

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TITLE: CHRYSANTHEMUM PLANT NAMED 'YELLOW
YOWOODSTOCK'

APPLICANT: WENDY R. BERGMAN

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

5 *Chrysanthemum X morifolium* cultivar Yellow Yowoodstock

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of
Chrysanthemum plant, botanically known as *Chrysanthemum X*
morifolium and hereinafter referred to by the name 'Yellow
10 Yowoodstock'.

The new Chrysanthemum is a product of a planned breeding
program conducted by the Inventor in Fort Myers, Florida. The
objective of the program is to create or discover new potted
Chrysanthemum cultivars that are suitable for year-round production
15 with uniform plant growth habit, good vigor and strong branching habit,
numerous inflorescences, desirable inflorescence form and floret colors,
fast and uniform flowering response, and good postproduction
longevity.

The new Chrysanthemum is a naturally-occurring whole plant
20 mutation of the Chrysanthemum cultivar Yowoodstock, disclosed in
U.S. Plant Patent application serial number 10/396,576. The new

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Chrysanthemum was discovered and selected by the Inventor as a single flowering plant from within a population of flowering plants of Yowoodstock in April, 2001, in a controlled environment in Fort Myers, Florida. The selection of this plant was based on its uniform plant
5 growth habit, good vigor and strong branching habit, numerous inflorescences, desirable inflorescence form and floret colors, fast and uniform flowering response, and good postproduction longevity.

Asexual reproduction of the new Chrysanthemum by vegetative tip cuttings was first conducted in Fort Myers, Florida in July, 2001.
10 Asexual reproduction by cuttings has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The cultivar Yellow Yowoodstock has not been observed under
15 all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength, and/or light level, without, however, any variance in genotype.

The following traits have been repeatedly observed and are
20 determined to be the unique characteristics of 'Yellow Yowoodstock'.

These characteristics in combination distinguish 'Yellow Yowoodstock' as a new and distinct Chrysanthemum:

1. Uniform and outwardly spreading plant habit.
2. Strong and freely branching growth habit.
- 5 3. Dark green-colored foliage.
4. Uniform flowering response and habit.
5. Can be grown as a disbud or as a spray-type.
6. Early flowering, eight week response time.
7. Large anemone-type inflorescences.
- 10 8. Yellow-colored ray florets and enlarged yellow green to yellow-colored disc florets.
9. Good postproduction longevity with plants maintaining good substance and color for about two to three weeks in an interior environment.
- 15 Plants of the new Chrysanthemum can be compared to plants of the parent, the cultivar Yowoodstock. Plants of the new Chrysanthemum differ from plants of the cultivar Yowoodstock primarily in ray floret coloration as plants of the cultivar Yowoodstock have white-colored ray florets.

Plants of the new Chrysanthemum can be compared to plants of the cultivar Yellow Blush, disclosed in U.S. Plant Patent number 9,455. In side-by-side comparisons conducted in Fort Myers, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Yellow Blush primarily in inflorescence form as plants of the cultivar Yellow Blush had daisy-type inflorescences.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new Chrysanthemum showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ from the color values cited in the detailed botanical description which accurately describe the colors of the new Chrysanthemum. The photograph on the first sheet comprises a side perspective view of typical flowering plants of 'Yellow Yowoodstock' grown as a spray-type. The photograph on the second sheet comprises a close-up view of typical inflorescences of 'Yellow Yowoodstock' grown as a spray-type.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where

general terms of ordinary dictionary significance are used. The
aforementioned photographs, following observations and measurements
describe plants grown and flowered during the winter in Salinas,
California, in a fiberglass-covered greenhouse and under conditions
5 which approximate those generally used in commercial potted
Chrysanthemum production. During the production of these plants, the
following conditions were measured: day temperatures, 21 to 27°C;
night temperatures, 17 to 19°C; and light levels, 5,000 to 6,000 foot-
candles. Four unrooted cuttings were directly stuck in 15-cm containers,
10 exposed to long day/short night conditions, and pinched once about two
weeks later. At the time of the pinch, the photoinductive short day/long
night treatments were initiated. Plants used for the description were
grown as spray-types. Measurements and numerical values represent
averages of typical flowering plants.

15 BOTANICAL CLASSIFICATION:

Chrysanthemum X morifolium cultivar Yellow Yowoodstock.

COMMERCIAL CLASSIFICATION:

Anemone-type potted Chrysanthemum.

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PARENTAGE:

Naturally-occurring whole plant mutation of the *Chrysanthemum*
X morifolium cultivar Yowoodstock, disclosed in U.S. Plant
Patent application serial number 10/396,576.

5 PROPAGATION:

Type: Terminal tip cuttings.

Time to initiate roots: About four days at 21°C.

Time to produce a rooted cutting: About ten days at 21°C.

Root description: White, close to 155D; fibrous.

10 Rooting habit: Freely branching.

PLANT DESCRIPTION:

Appearance: Herbaceous anemone-type potted Chrysanthemum
that can be grown as a spray or as a disbud-type. Upright with
lateral branches outwardly spreading; uniformly mounded crown.

15 Strong and freely branching growth habit; about three lateral
branches develop after removal of terminal apex (pinching);
dense and full plants.

Plant height: About 25 cm.

Plant width: About 33 cm.

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Lateral branches:

Length: About 18.5 cm.

Diameter: About 4 mm.

Internode length: About 1.1 cm.

5 Strength: Strong.

Texture: Pubescent.

Color: Close to 144A.

Foliage description:

Arrangement: Alternate; simple.

10 Length: About 8.7 cm.

Width: About 5.3 cm.

Apex: Mucronate.

Base: Mostly truncate.

15 Margin: Palmately lobed, sinuses between lateral lobes
parallel to divergent.

Texture, upper and lower surfaces: Pubescent.

Color:

Developing and fully expanded foliage, upper
surface: Close to 147A.

Developing and fully expanded foliage, lower surface: Close to 147B.

Venation, upper surface: Close to 147A to 147B.

Venation, lower surface: Close to 147B.

- 5 Petiole length: About 2.4 cm.
- Petiole diameter: About 4 mm.
- Petiole color, upper surface: Close to 146A.
- Petiole color, lower surface: Close to 146B.

INFLORESCENCE DESCRIPTION:

- 10 Appearance: Anemone-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets develop acropetally on a capitulum. Inflorescences not fragrant. Plants can be grown as spray or as disbud-types.
- 15 Flowering response: Under natural conditions, plants flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Early flowering; plants exposed to two weeks of long

day/short night conditions followed by photoinductive short day/long night conditions flower about eight weeks later.

Postproduction longevity: Inflorescences maintain good color and substance for about two to three weeks in an interior environment.

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Quantity of inflorescences: About four inflorescences develop per lateral branch.

Inflorescence bud:

Height: About 5 mm.

10

Diameter: About 8 mm.

Shape: Oblate.

Color: Close to 144A.

Inflorescence diameter: Large, about 10.2 cm.

Inflorescence depth (height): About 3.4 cm.

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Diameter of disc: About 4 cm.

Receptacle diameter: About 9 mm.

Ray florets:

Shape: Elongated oblong.

Orientation: Initially upright, then perpendicular to the peduncle and eventually reflexing.

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- Aspect: Straight to arching.
- Length: About 5 cm.
- Corolla tube length: About 4 mm.
- Width: About 8 mm.
- 5 Apex: Emarginate, mucronate or acute.
- Base: Fused into a corolla tube.
- Margin: Entire.
- Texture: Smooth, glabrous, satiny.
- Number of ray florets per inflorescence: About 70
- 10 arranged in two to three whorls.
- Color:
- When opening and fully opened, upper surface:
- Close to 6A.
- When opening and fully opened, lower surface:
- 15 Close to 6D.
- Disc florets:
- Arrangement: Massed at center of receptacle.
- Shape: Tubular, enlarged.
- Apex: Five-pointed.
- 20 Length: About 2.3 cm.

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Diameter, apex: About 6 mm.

Diameter, base: About 2 mm.

Number of disc florets per inflorescence: About 140.

Color:

5 Immature: Close to 144A.

Mature, throat: Close to 6A.

Mature, tube: Close to 6D.

Phyllaries:

Quantity per inflorescence: About 24.

10 Length: About 8 mm.

Width: About 4 mm.

Shape: Deltoid.

Apex: Acute.

Base: Truncate.

15 Margin: Entire.

Texture, upper surface: Waxy, smooth.

Texture, lower surface: Pubescent.

Color, upper surface: Close to 146A to 146B.

Color, lower surface: Close to 144A.

Peduncles:

Length:

First peduncle: About 4.5 cm.

Fourth peduncle: About 7 cm.

5 Diameter: About 2.5 mm.

Angle to vertical: About 45° from vertical.

Strength: Strong, flexible.

Texture: Pubescent.

Color: Closest to 144A.

10 **Reproductive organs:**

Androecium: Present on disc florets only.

Anther color: Close to 12A.

Pollen amount: None observed.

Gynoecium: Present on both ray and disc florets.

15 Style color: Close to 144B to 144C.

Stigma color: Close to 9A.

Seed/fruit: Seed and fruit production has not been observed.

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DISEASE/PEST RESISTANCE:

Resistance to pathogens and pests common to Chrysanthemums has not been observed on plants grown under commercial greenhouse conditions.